

The New York Times Book Review

OCTOBER 18, 1953

Copyright, 1953, by The New York Times Company

SECTION 7

The Mushroom Cloud And the Road Ahead

REPORT ON THE ATOM. By Gordon Dean. Illustrated. 321 pp. New York: Alfred A. Knopf. \$5.

By ROBERT OPPENHEIMER

THE atom, like all that touches us deeply, has its Stephen Dedalus as well as its Bloom, its lovers of Shiva and its devotees of Vishnu. This admirable book—informative, unpretentious and earnest—is not for Dedalus or for Shiva's friends. "Report on the Atom" has little of the wonder of discovery of the atomic world; it has nothing of the terror and the hope which the beginnings of the atomic age stirred in so many. This, the author makes clear, was not his intention.

Gordon Dean, for three years the chairman of the Atomic Energy Commission of the United States, has written rather a comprehensive factual account of what the United States atomic energy program is, of how, and to some extent why, we will shortly have spent some ten billion dollars on its enterprise. Mr. Dean was a public servant who knew the circumstantial details of the undertaking for which he bore responsibility, who learned not without effort and learned well. This is largely a public record of what he has learned and what he rightly believes it will be helpful for others to learn.

That such a record can be written without trespassing on secret material, that it can be intelligible without reference to prior technical training, may come as a surprise. It is part of the author's thesis that what is neither secret nor technical is nevertheless worth knowing; he has made a clear case that it is interesting. Not all of the many varied chapters can be equally successful. Limited by secrecy, one can write in a more informative way of the history of our efforts to develop atomic reactors, their purposes and general characteristics, than one can of atomic weapons. Indeed, the chapter in which Mr. Dean outlines in detail what reactors we have built, for what purpose, and with what relevance to the peaceful uses of isotope production and civil power would seem to me a model of clarity and of interest. It should provide a needed basis for the thoughtful evaluation in the following chapter of the evolving prospects of civil power.

Part of Mr. Dean's exposition would appear to be directed at myths which

Mr. Oppenheimer is director of the Institute for Advanced Study at Princeton. He was wartime director of the Los Alamos Laboratory, a member of the Acheson-Lilienthal panel on the international control of atomic energy and for six years chairman of the General Advisory Committee to the Atomic Energy Commission.

he regards as harmful to public understanding. Thus, in a chapter on The International Atom, there is an account of the great and decisive contributions of scientists not native to the United States in the discoveries that led to the large-scale release of atomic energy and of the great part played by British and refugee scientists in directing the attention of the Government of the United States to the importance of the atom.

THIS chapter also contains a balanced, informative and inspiring account of what other nations are doing in the atomic field. This is an advocate's brief against the view that the atom is in any sense "made in the U. S. A." There is an analogous brief directed against the myth of Soviet technical backwardness; against the view that only by espionage (although the author does not discount espionage) was the U.S.S.R. able to make progress; and against any of the comfortable varieties of assurance that the Soviet system is incapable of discovery, of exploitation, or of the creation and maintenance of an atomic enterprise comparable with ours.

One cannot read the list of chapter titles, and certainly cannot read this book, without a certain quizzical astonishment at the strange themes that the atom has brought together. The chapter headings of six of the fifteen chapters may indicate how varied these themes are: Uranium Is Where You Find It, The Payoff: Weapons, The Military and the Atom, The Quest for Knowledge, Secrecy, Security and Spies, and Behind the Iron Curtain.

The Atomic Energy Commission has had to concern itself with finding and exploiting its raw materials in remote, varied and quite odd places; it has had to spend many billions of dollars on some of the largest, most intricate and most novel industrial enterprises in the world. It has had to find ways to obtain power, to build cities, to condemn land, to negotiate with the Executive and the Congress, to thwart spies, to make isotopes available to science and technology, to promote scientific discovery, to analyze what our reticent and hostile competitors are up to.

NEITHER this book, nor the history of the Atomic Energy Act which assigns these varied responsibilities to one agency, wholly establishes this as a healthy unity of functions. This great variety of themes and the detailed and informative character of Mr. Dean's writing make the occurrence of some errors of fact inevitable—many more errors, in all probability, than this reviewer has detected. Some, like the as- (Continued on Page 24)



1952: Troop maneuvers during atomic operations at Yucca Flat, Nevada.